

Applicants have studied the Office Action dated March 26, 2003 and have made amendments to the claims. No new matter has been added. It is submitted that the application, as amended, is in condition for allowance. By virtue of this amendment, claims 1-26 are pending. Reconsideration and further examination of the pending claims in view of the above amendments and the following remarks is respectfully requested. In the Office Action, the Examiner:

- (2) Objected to the disclosure because on page 12, line 20 the meaning of the term *DTD* is not defined;
- (3) Rejected claims 1-18 under 35 U.S.C. §112, second paragraph because independent claim 1 has the recitation of "determining if a search engine is supported by a comparison system" is unclear, vague and indefinite in context of the claim;
- (4-5) Rejected claims 1, 20, and 23-26 under 35 U.S.C. §102(e) as being anticipated by Horowitz et al (U.S. Patent No. 6,236,987);
- (6-7) Rejected claim 2 under 35 U.S.C. § 103(a) as being unpatentable over Horowitz et al (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6453,312);
- (8) Rejected claims 3-5 under 35 U.S.C. § 103(a) as being unpatentable over Horowitz et al (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6453,312) and in further view of Baisley (U.S. Patent No. 6,502,112); and
- (9) Rejected claims 6-18 under 35 U.S.C. § 103(a) as being unpatentable over Horowitz et al (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6453,312) and in further view of Baisley (U.S. Patent No. 6,502,112), and further in view of Chu (U.S. Patent No. 6427,146).

(2) Objection to the Specification

As noted above, the Examiner objected to the disclosure because on page 12, line 20 the meaning of the term *DTD* is not defined. The Applicants have amended the disclosure to

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define the term DTD as suggested by the Examiner to correspond to "document type definition." As well known in the art, a document type definition (DTD) is a specific definition that follows the rules of the Standard Generalized Markup Language (SGML) such as HTML. Further the Applicants have amended the specification to define DB as "DataBase" as well. No new matter has been added.

Overview of the Present Invention

Preferred embodiments of the present invention is directed to a method, computer program product and system for measuring the similarity between documents, especially documents which are returned as part of search results in a search engine. The measurement of similarity is provided as a numeric value as an indicator at to how much the content and/or the structure of two or more documents are similar. The present invention extracts from a search engine each of the search results using a DTD (data type descriptor) scheme. This is necessary because each search engine uses a different format for search result presentation. The present invention solves the time-consuming problem of whether a given document returned in a search results, e.g. document A, has similar content and/or structure of a second document, e.g. document B, returned as part of a search result without the need for the user to open document B. The present invention provides a numeric value as a measure of similarity between documents. Using this numeric value as a indicator, a user can quickly determine how closely related a given document A is to second document B and/or other documents.

In order to more particularly point out this feature of comparing the similarity of two or more documents returned as part of a search request, "wherein the comparison system returns a numeric similarity value which represents the similarity of the documents", the following language has been added to the independent claims, i.e., claims 1, 19, 20, and 23 as follows:

claim 1

determining if a search engine is coupled to a comparison system for

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comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents.

claim 19

a comparison module for comparing contents of at least two documents for similarity, wherein the comparison module returns a numeric similarity value which represents the similarity of the documents.

claim 20

comparing at least two documents for similarity, wherein the instruction of comparing documents includes returning a numeric similarity value which represents the similarity of the documents.

claim 23

beginning comparison of the retrieved search result documents, wherein the comparison includes returning a numeric similarity value which represents the similarity of the documents.

Support for this amendment is found, for example, in the specification at least at page 10, line 25-28, and page 13, lines 12-16 and lines 26-28. No new matter has been added.

(3) Rejection under 35 U.S.C. §112, Second Paragraph

As noted above, the Examiner rejected claims 1-18 under 35 U.S.C. §112, second paragraph because independent claim 1 has the recitation of "determining if a search engine is supported by a comparison system" is unclear, vague and indefinite in context of the claim. Independent claim 1 has been amended to clarify "determining if a search engine is coupled to a comparison system for comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents." The Applicants submit that claim 1 as amended particularly points out and distinctly claims the present invention. Further since claims 2-18, depend from newly amended independent claim1, and dependent

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claims contain all the limitations of the independent claims, claims 2-18 particularly point out and distinctly claim the present invention as well. Accordingly, the Applicants respectfully submit that the Examiner's rejection has been overcome.

(4-5) Rejection under 35 U.S.C. §102(e)

As noted above, the Examiner rejected claims 1, 20, and 23-26 under 35 U.S.C. §102(e) as being anticipated by Horowitz et al (U.S. Patent No. 6,236,987). Independent claims 1, 20, and 23 have been amended to clarify the present invention. The Examiner at page 3 of the office action states "Horowitz et al. teaches a method for comparison of documents [...] "determining is a search engine is supported by a comparison system (see column 7, lines 3-20, also see column 21, line 66 though column 22, line 7). However, careful reading of Horowitz discloses a method and system for organizing the results of search results into topics, e.g. supertopics, subtopics, theme topics and perspective topics. See Horowitz in the Summary of The Invention at least at col. 3, lines 25 through col. 5, line 50. The present invention distinguishes over Horowitz in that the "comparison" includes "returning a numeric similarity value which represents the similarity of the documents." Horowitz does not teach or disclose a "numeric similarity value which represents the similarity of the documents." In contrast the comparison taught by Horowitz is for determining topics, subtopics, supertopics, theme topics and perspective topics. Horowitz is silent on providing a numeric similarity value which represents the similarity of the documents as a whole. In contrast Horowitz, col. 21, line 1 through col. 22, line 19 describes a similarity between a given "candidate theme topic" relative to "an entire document collection." Determining the occurrence of a given topic through a set of documents is not the same as determining the similarity of the entire contents of a first document against the contents of a second document. Horowitz is teaches matching "candidate theme topics" but not the contents of the documents themselves. Moreover, the result of the "Theme Topic Generation" in Horowitz will not provide "a numeric similarity value which represent the similarity of the documents." Horowitz only returns the frequency of occurrence of the "candidate theme topic" itself.

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The Examiner cites 35 U.S.C. § 102(e) and a proper rejection requires that a <u>single reference teach</u> (i.e., identically describe) each and every element of the rejected claims as being anticipated by Horowitz. Because the elements in independent claims 1, 20 and 23 of "<u>returning a numeric similarity value which represents the similarity of the documents</u>." is <u>not</u> taught or disclosed by Horowitz. Accordingly, the present invention distinguishes over Horowitz for at least this reason. The Applicants respectfully submitted that the Examiner's rejection under 35 U.S.C. § 102(e) has been overcome.

Independent claims 1, 20, and 23 have been amended to distinguish over Horowitz. Claims 24-26 depend from claim 23, since dependent claims contain all the limitations of the independent claims, claims 24-26 distinguish over Horowitz, as well.

Moreover, as to claims 25 and 26, the "graphic display" in the present invention is "a numeric similarity value which represents the similarity of the documents," whereas the Venn diagram in Horowitz is specifically directed to "supertopic and subtopic arrangements." See Horowitz at col. 7, line 40-41, and col. 11, lines 6-7. Accordingly, claims 25 and 26 distinguish over Horowitz for this reason as well.

(6-7) Rejection under 35 U.S.C. §103(a) as being unpatentable over Horowitz in view of Goiffon

As noted above, the Examiner rejected claim 2 under 35 U.S.C. §103(a) as being unpatentable over Horowitz et al (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6453,312). Independent claim 1 has been amended to distinguish over Horowitz taken alone and/or in view of Goiffon. As the Examiner correctly states in the

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¹ See MPEP §2131 (Emphasis Added) "A claim is anticipated only if <u>each and every element</u> as set forth in the claim is found, either expressly or inherently described, in a <u>single</u> prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim."

office action on page 6, "Horowitz et al. does not teach identifying the search result items and marking them by a result set manager" and goes on to combine Goiffon.² To begin Horowitz as applied to Goiffon for the reasons cited in the section above, is silent on "determining if a search engine is coupled to a comparison system for comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents." Further claim 2 has been amended to clarify "identifying any document identifiers in the search result items and marking them by a result set manager." Accordingly, the claim 2, distinguishes over Horowitz taken alone and/or in view of Goiffon for at least this reason.

Moreover, the Federal Circuit has consistently held that when a §103 rejection is based upon a modification of a reference that destroys the intent, purpose or function of the invention disclosed in the reference, such a proposed modification is not proper and the prima facie case of obviousness can not be properly made. See In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Here the intent, purpose and function of Horowitz is to generate "Topic Arrangements" to organize search results; in contrast the intent and purpose of the present invention is "a numeric similarity value which represents the similarity of the documents" returned from a search result. The Applicants respectfully submit that modifying Horowitz to provide a "numeric similarity" of the entire document in the search results destroys Horowitz intent on providing topics in search results. Further this combination of Horowitz with Goiffon destroys the marking intent of Goiffon to mark words or word variant strings for deletion at col. 15, lines 50-62. The present invention is marking any document identifiers in the search result items because different search engines present search results differently. To properly handle the formats of different search engines, the documents must be identified and marked such as a URL to a document. The combination of Horowitz and Goiffon as suggested by the Examiner, destroys the intent and purpose of Horowitz taken alone and/or in view of with Goiffon. Accordingly, the present invention is distinguishable over Horowitz taken alone and/or in

² Applicants make no statement whether such combination is even proper.



view of Goiffon for this reason as well.

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Continuing further, when there is no suggestion or teaching in the prior art for determining if a search engine is coupled to a comparison system for comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents" and "identifying any document identifiers in the search result items and marking them by a result set, the suggestion can not come from the Applicant's own specification. The Federal Circuit has repeatedly warned against using the Applicant's disclosure as a blueprint to reconstruct the claimed invention out of isolated teachings of the prior art. See MPEP §2143 and Grain Processing Corp. v. American Maize-Products, 840 F.2d 902, 907, 5 USPQ2d 1788 1792 (Fed. Cir. 1988) and In re Fitch, 972 F.2d 160, 12 USPQ2d 1780, 1783-84 (Fed. Cir. 1992). The prior art reference Kawamura does not even suggest, teach or mention "determining if a search engine is coupled to a comparison system for comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents from a set of search results.

(8) Rejection under 35 U.S.C. §103(a) as being unpatentable over Horowitz in view of Goiffon and in further View of Baisley

As noted above, the Examiner rejected claims 3-5 under 35 U.S.C. §103(a) as being unpatentable over Horowitz et al (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6,453,312) and in further view of Baisley (U.S. Patent No. 6,502,112). As noted above independent claim 1 has been amended and claim 2 has been amended to clarify the present invention. As the Examiner correctly states in the office action on page 7, "Horowitz et al. as modified does not teach retrieving knowledge of a structure and content of the search result items by a result set manager from a database" and goes on to

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combine Horowitz, Baisley with Goiffon.³ To begin Horowitz as applied to Goiffon for the reasons cited in the section above, is silent on "determining if a search engine is coupled to a comparison system for comparing content of at least two documents identified in the search results, wherein the comparison system returns a numeric similarity value which represents the similarity of the documents." Further claim 2 has been amended to clarify "identifying any document identifiers in the search result items and marking them by a result set manager." Accordingly, the claims 3-5, which depend from claim 2 of present invention distinguishes over Horowitz taken alone and/or in view of Goiffon and/or in view of Balsley for at least this reason. Moreover Baisley is not directed to comparing documents and providing a numeric similarity value which represents the similarity of the documents. Baisley is comparing documents to see if they are equal/unequal 28 but not similar at least similar to the extent a numeric similarity value is returned. See Baisley FIG. 2 and col. 4, lines 60-65. Accordingly, claims 3-5 of the present invention distinguish over Horowitz taken alone and/or in view Goiffon and/or in view of Baisley for this reason as well.

(9) Rejection under 35 U.S.C. §103(a) as being unpatentable over

Horowitz in view of Goiffon and in further View of Baisley and in further view of Chu As noted above, the Examiner rejected claims 6-18 under 35 U.S.C. § 103(a) as being unpatentable over Horowitz et al. (U.S. Patent No. 6,236,987) in view of Goiffon et al. (U.S. Patent No. 6453,312) and in further view of Baisley (U.S. Patent No. 6,502,112), and further In view of Chu (U.S. Patent No. 6427,146). As noted above independent claim 1 has been amended and claim 2 has been amended to clarify the present invention. As the Examiner correctly states in the office action on page 7, "Horowitz et al. as modified does not teach displaying an enhanced search result item set in a display by a GUI/Event Manager." and goes on to combine Horowitz, Baisley, Goiffon with Chu.⁴ Accordingly, the

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³ Applicants make no statement whether such combination is even proper.

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claims 6-18, which depend from claim 2 of present invention distinguish over Horowitz taken alone and/or in view of Goiffon and/or in view of Baisley and/or Chu for at least this reason.

CONCLUSIONS

The remaining cited references have been reviewed and are not believed to effect the patentability of the claims as amended.

In this response, Applicants have amended certain claims. In light of the Office Action, Applicants believe these amendments serve a useful clarification purpose, and are desirable for clarification purposes, independent of patentability. Accordingly, Applicants respectfully submit that the claim amendments do not limit the range of any permissible equivalents.

Applicants acknowledge the continuing duty of candor and good faith to the disclosure of information known to be material to the examination of this application. In accordance with 37 CFR §§ 1.56, all such information is dutifully made of record. The foreseeable equivalents of any territory surrendered by amendment is limited to the territory taught by the information of record. No other territory afforded by the doctrine of equivalents is knowingly surrendered and everything else is unforeseeable at the time of this amendment by the Applicants and their attorneys.

Applicants respectfully submit that all of the grounds for rejection stated in the Examiner's Office Action have been overcome, and that all claims in the application are allowable. No new matter has been added. It is believed that the application is now in condition for allowance, which allowance is respectfully requested.

PLEASE, if for any reason the Examiner finds the application other than in condition for allowance, the Examiner is invited to call either of the undersigned attorneys at (561) 989-

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9811 should the Examiner believe a telephone interview would advance the prosecution of the application.

Respectfully submitted,

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Jon Gibbons Registration No. 37,333

Attorney for Applicants

FLEIT, KAIN, GIBBONS, GUTMAN & BONGINI P.L. One Boca Commerce Center, Suite 111 551 Northwest 77th Street Boca Raton, FL 33487 Tel. (561) 989-9811 Fax (561) 989-9812